

## **REMARKS**

### **I. Information Disclosure Statement**

The Applicant brings to the Examiner's attention the cited art in the Information Disclosure Statement filed contemporaneously with this reply.

### **II. Claim Rejections Under 35 U.S.C. § 103(a) - Huang/Lundh**

The Examiner rejected claims 1-10 and 18 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,493,727, issued to Huang et al. ("Huang") in view of U.S. Pat. No. 6,373,834, issued to Lundh et al. ("Lundh").

Claims 1-10 and 18 are allowable over Huang and Lundh for at least the following reasons: 1) Huang is antedated by the date of invention of the subject matter of claims 1-10 and 18, as established by the Declaration under 37 C.F.R. § 1.131 signed by both inventors and submitted with this Reply; and 2) even if Huang is prior art (which it is not), Huang and Lundh do not render claims 1-10 and 18 obvious.

#### **A. Huang Is Antedated By The Date Of Invention Of The Subject Matter Of Claims 1-10 And 18**

The effective date of Huang is Feb. 7, 2000, and the instant application was filed on April 10, 2000. The Applicant has provided with this reply a Declaration under 37 C.F.R. § 1.131 establishing that the subject matter of claims 1-10 and 18 was invented prior to the effective date of Huang. Therefore, the rejection of claims 1-10 and 18 under Huang and Lundh must be withdrawn.

#### **B. Huang And Lundh Do Not Render Claims 1-10 and 18 Obvious**

Even if Huang is prior art (which it is not), Huang and Lundh do not render claims 1-10 and 18 obvious. To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest *all* the claim limitations. M.P.E.P. § 2143.

**i. Huang And Lundh Do Not Disclose, Teach Or Suggest All Of The Claimed Limitations Of Claims 1 And 18**

The Examiner states that Huang does not teach "transmitting a first update message from the first database to the second database, the first update message including the incremented first synchronization parameter, the second synchronization parameter, and the updated data record from the first database" as claimed in claims 1 and 18, and thus combines Huang with Lundh. Lundh, however, only discloses a system directed to the synchronization of master and slave *timing units* in a telecommunications network so that plural base stations participating in a connection send the same frame information at the same time to a mobile station. Lundh, 1:39-2:8. The timing units of Lundh are clearly not directed to the synchronization of databases, or even related to databases.

In Lundh, a synchronization analysis command message includes a first time stamp value  $t_1$  related to the time that the synchronization analysis command message is transmitted from the initiating timing unit to the responding timing unit. A second time stamp value  $t_2$  related to the time that the synchronization analysis command message is received at the responding timing unit and is inserted in the synchronization analysis response message by the responding timing

unit. A third time stamp value  $t_3$  is also inserted in the synchronization analysis response message by the responding timing unit, and is related to the time that the synchronization analysis response message is sent from the responding timing unit. The initiating unit determines a fourth time stamp value  $t_4$  indicative of a time of reception of the synchronization sequence response message at the initiating timing unit. Lundh, 3:40-55.

When the initiating unit is a master unit, the initiating timing unit determines the synchronization adjustment value by comparing the second parameter  $t_2$  included in the synchronization analysis response message with a predicted second parameter  $t_{2\text{-predicted}}$ . The predicted second time stamp value  $t_{2\text{-predicted}}$  is determined as  $t_{2\text{-predicted}} = ((t_1 + t_4)/2) - ((t_3 - t_2)/2)$ . The synchronization adjustment value is then determined as  $t_{2\text{-predicted}} - t_2$ . Lundh, 3:56-4:5.

*The parameters  $t_1$  through  $t_4$  are preferably values of system frame counters. In particular, the parameters  $t_1$  and  $t_4$  are then-current values of a system frame counter of the initiating timing unit. Likewise, the parameters  $t_2$  and  $t_3$  are then-current values of a system frame counter of the responding timing unit. The synchronization adjustment value is used to adjust the value of the system frame counter of the responding timing unit.* Lundh, 4:6-13.

The principles of diversity and soft-handover in cellular telecommunications require that the base stations participating in a particular connection be synchronized relative to an upper node, e.g., to the radio network controller. Synchronization is required since, among other things, the plural base stations participating in a connection *must send the same frame information at the same time* to the mobile station involved in the connection. Lundh, 2:1-8.

Clearly, then, Lundh teaches a system for synchronizing time frame counters which, in turn, synchronize when information is sent and received; Lundh does not teach or suggest anything about synchronizing *first and second databases, and does not teach or suggest an*

*incremented first synchronization parameter and a second synchronization parameter.*

Accordingly, Lundh, either alone or in combination with Huang, does not disclose, teach or suggest "transmitting a *first update message* from the first database to the second database, the first update message including the *incremented first synchronization parameter, the second synchronization parameter*, and the updated data record from the first database" as claimed in claim 1 and 18. Thus, the rejection of claims 1 and 18, and all claims depending therefrom, should be withdrawn for this additional reason.

**ii. No Motivation To Combine Lundh and Huang Has Been Shown**

In addition to the reasons noted above, the Applicant respectfully submits that the Examiner has not provided a motivation to combine Huang and Lundh, and therefore the rejection is defective. "There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998); M.P.E.P. § 2143.01.

The Examiner states that it would have been obvious to combine Lundh and Huang because "when the master timing unit is the initiating timing unit, the master timing unit transmits the synchronization adjustment value in a synchronization updating command message to the slave timing unit."

As the Applicants have already shown, however, the parameters  $t_1$  through  $t_4$  are preferably values of system frame counters to determine a synchronization adjustment value that is used to adjust the value of the system frame counter of the responding timing unit. This adjustment allows the plural base stations participating in a cellular telecommunication

connection to *send the same frame information at the same time to the mobile station* involved in the connection.

Thus, the Applicant respectfully submits that the Examiner's rationale for combining Huang and Lundh does not establish a motivation to combine. First, the nature of the problem to be solved in Lundh (calculating a synchronization adjustment value used to adjust the value of the system frame counter of the responding timing unit) is different than that of the instant application (synchronizing two databases). Second, Lundh does not teach or suggest the missing limitation of claims 1 and 18, i.e., Lundh does not teach "transmitting a first update message from the first database to the second database, the first update message including the incremented first synchronization parameter, the second synchronization parameter, and the updated data record from the first database." And third, one of ordinary skill would not combine Lundh and Huang for the reasons stated above. Indeed, combining Lundh and Huang does not even appear to provide a reasonable expectation of success. Thus, the rejection of claims 1 and 18, and all claims depending therefrom, should be withdrawn for this additional reason.

### **III. Claim Rejections Under 35 U.S.C. § 103(a) - Tran/Lundh**

The Examiner rejected claims 11-17 and 19-31 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,202,060, issued to Tran ("Tran"), in view of Lundh.

Tran discloses a computer system connected to one or more input/output (I/O) ports 42 which allows the CPU 20 to communicate with other computers. Each of the I/O ports 42 may be a parallel port, a serial port, or alternatively a proprietary port to enable the computer system to dock with the host computer. In the event that the I/O port 42 is housed in a docking port 84 (FIG. 5), after docking, the I/O ports 42 and software located on a host computer 82 (FIG. 5)

support an automatic synchronization of data between the computer system and the host computer. During operation, the synchronization software runs in the background mode on the host computer 82 and listens for a synchronization request or command from the computer system 10 of the present invention. Changes made on the computer system and the host computer will be reflected on both systems after synchronization. Preferably, the synchronization software only synchronizes the portions of the files that have been modified to reduce the updating times. Tran, 12:8-24.

**A. Claims 11 And 17**

The Examiner stated that Tran does not teach "if a data record is updated at the host system, then updating the first host synchronization parameter, and transmitting a first update message from the host system to the portable data communication device; and if a data record is updated at the device, then updating the second device synchronization parameter, and transmitting a second update message from the portable data communication device to the host system" and thus combines Tran with Lundh.

The Applicant incorporates the arguments presented with respect to Lundh above. Thus, for similar reasons as given with respect to claims 1 and 18 above, the Applicant submits that 1) Lundh, when combined with Tran, does not teach all of the limitations of claims 11 and 17; and 2) there is no motivation to combine Lundh with Tran. Specifically, Lundh and Tran, when combined, do not disclose, teach or suggest the steps "if a data record is updated at the host system, then updating the first host synchronization parameter, and transmitting a first update message from the host system to the portable data communication device; and if a data record is updated at the device, then updating the second device synchronization parameter, and

transmitting a second update message from the portable data communication device to the host system" as recited in claim 11, or such related steps as recited in claim 17.

Additionally, the Applicant respectfully submits that the Examiner's rationale for combining Tran and Lundh does not established a motivation to combine for similar reasons given with respect to claims 1 and 18, i.e., Lundh solves a different problem in a different way. Furthermore, combining Lundh and Tran does not appear to provide a reasonable expectation of success. Accordingly, the rejection of claims 11 and 17, and all claims depending therefrom, should be withdrawn.

**B. Claims 19 and 25**

The Examiner states that Tran does not teach "software operating at the host system for updating a data record and for generating a first update message that is transmitted from the host system to the portable data communication device when a data record is updated at the host system, the first update message including the first host synchronization parameter, the first device synchronization parameter, and the updated data record stored at the host system; and software operating at the portable data communication device for updating a data record and for generating a second update message that is transmitted from the portable data communication device to the host system when a data record is updated at the portable data communication device, the second update message including the second host synchronization parameter, the second device synchronization parameter, and the updated data record stored at the portable data communication device" and thus combines Lundh with Tran.

For similar reasons as given with respect to claims 1, 11, 17 and 18 above, the Applicant submits that 1) Lundh, when combined with Tran, does not teach all of the limitations of claims

19 and 25; and 2) there is no motivation to combine Lundh with Tran. Specifically, Lundh does not teach "software operating at the host system for updating a data record and for generating a first update message that is transmitted from the host system to the portable data communication device when a data record is updated at the host system, *the first update message including the first host synchronization parameter, the first device synchronization parameter, and the updated data record stored at the host system*; and software operating at the portable data communication device for updating a data record and for generating a second update message that is transmitted from the portable data communication device to the host system when a data record is updated at the portable data communication device, *the second update message including the second host synchronization parameter, the second device synchronization parameter, and the updated data record stored at the portable data communication device.*"

With respect to the motivation to combine, the Examiner states "the mobile station transmits with the lower power which is request[ed] by one of the base stations. The base station performs calculations and compensates for discrepancies in the round-trip time delay measurements by adjusting the base station clock." The Applicants respectfully submit that this rationale does not provide a motivation to combine. In fact, the Examiner's statement provides further support for the Applicant's position that Lundh solves a different problem, namely, synchronization of data transmissions, and not the synchronization of *databases*. Furthermore, combining Lundh and Tran does not provide a reasonable expectation of success. Accordingly, the rejection of claims 19 and 25, and all claims depending therefrom, should be withdrawn.



**C. Claim 27**

The Examiner states that Tran does not teach "transmitting a first update message from the one host system to the portable data communication device, the first update message including the incremented first synchronization parameter, the second synchronization parameter, and the updated data record from the one host system" as claimed in claim 27 and thus combines Lundh with Tran.

For the same reasons as given with respect to claims 1 and 18 above, however, the Applicant submits that 1) Lundh, when combined with Tran, does not teach all of the limitations of claim 27; and 2) there is no motivation to combine Lundh with Tran. Specifically, Lundh and Tran, when combined, do not disclose, teach or suggest the steps "transmitting a first update message from the one host system to the portable data communication device, *the first update message including the incremented first synchronization parameter, the second synchronization parameter, and the updated data record from the one host system*" as claimed in claim 27.

Additionally, the Applicant respectfully submits that the Examiner's rationale for combining Tran and Lundh does not establish a motivation to combine for the same reasons given with respect to claims 1 and 18. Furthermore, combining Lundh and Tran does not provide a reasonable expectation of success. Accordingly, the rejection of claim 27, and all claims depending therefrom, should be withdrawn.

#### IV. Conclusion


For the reasons stated above, Applicant respectfully submits that the pending claims are in condition for allowance and requests that a Notice of Allowance be issued.

The Commissioner is hereby authorized to charge any fees associated with this response to Jones Day's Deposit Account No. 501432, ref: 555255-012123.

Respectfully submitted,

JONES DAY  
Attorneys for Applicant

Date: May 16, 2003

By:   
Paul E. Franz  
Reg. No. 45,910

North Point  
901 Lakeside Ave.  
Cleveland, Ohio 44114  
Phone (216) 586-1162